UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604

DATE: JUL 31 2017

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
Kimble Sanitary Landfill, Dover, Ohio

FROM: Vicky Mei, Environmental Engineer
AECAB (IL/IN)

THRU: Nathan Frank, Section Chief
AECAB (IL/IN)

TO: File

BASIC INFORMATION

Facility Name: Kimble Sanitary Landfill

Facility Location: 3596 OH-39, Dover, Ohio 44622

Date of Inspection: June 22, 2017

Inspection Report Writer: Vicky Mei, Environmental Engineer

Other Attendees:
1. Kenneth Ruffatto, Environmental Engineer, EPA
2. Scott Connolly, Environmental Engineer, EPA
3. Dirk Kimble, Landfill Manager, Kimble Sanitary Landfill
4. Nathan Vaughan, General Counsel, Kimble Sanitary Landfill

Purpose of Inspection: General Clean Air Act Inspection

Facility Type: Municipal Solid Waste Landfill

Regulations Central to Inspection: Landfill NSPS (40 CFR Part 60, Subpart WWW), Landfill NESHAP (40 CFR 63, Subpart AAAA)

Arrival Time: 3:00PM
Departure Time: 5:00PM

Inspection Type:

☒ Unannounced Inspection

☐ Announced Inspection

OPENING CONFERENCE

☒ Credentials Presented

☒ CBI warning to facility provided

The following information was obtained verbally from Mr. Dirk Kimble and Mr. Nathan Vaughan unless otherwise noted.

Process Description:

The Kimble Sanitary Landfill (the Landfill) began accepting waste in 1969. The Landfill started filling in waste on the western side of the site in an area that is unlined, but has a base of five feet of compacted clay. The west side was later capped with two feet of compacted clay. Once the west side was capped, the Landfill started placing waste in the eastern sections of the site which is lined with a geomembrane liner, 16 inches of sand and a 10 feet fluff layer for drainage. This section of the Landfill was filled in starting from cell 1A on the east side and going over the cap of the west Landfill to cells 1B and 1C on the north side. The Landfill then filled in cell 1D on the east side and is currently filling Cell 2D up to a 1300 feet grade. The Landfill uses 30 inches of dirt as intermediate cover and either tarps or 6 inches to 1 foot of dirt for daily cover. There are approximately 80 active vertical wells total, with 30 to 40 wells on the east side and 40 on the west side. Of those 80 wells, there are 20 horizontal wells in the eastern sections of the Landfill. The collected landfill gas is routed to a flare on the western end of the old capped area. There is also a much smaller and older back-up flare at Cell 2C that was not in use at the time of the inspection. Leachate is routed to 4 pump stations – 2 each on the northern and southern ends of the Landfill – before being stored in two 3,200-gallon leachate tanks. Active fill areas are sprayed with five, 5,500 gallon loads of recirculated leachate each day. There are also 3 storm water ponds, on-site compositing, and a recycling holding center.

Staff Interview:

The Kimble Sanitary Landfill is a subsidiary of the Kimble Company, which also manages oil and gas wells, landfill haul trucks, and the mining of shale, coal, and limestone. The Kimble Sanitary Landfill is the only Landfill under Kimble Company ownership, and shares the site with the company's mineral mining operation. The east side of the Landfill is currently being excavated, using explosives above the clay liner. The Landfill operations fill in previously quarried areas at a rate of about 3,800 to 4,000 tons of waste per day. The accepted waste is hauled from transfer stations to the east of the Landfill by Kimble Company's subsidiary haul truck company. The waste consists of mostly general solid waste (municipal solid waste), with drywall and construction and demolition waste mixed in. The Landfill accepts tire shreds, but not auto shredder residue, although it has in the past, nor friable asbestos. Daily logs of the accepted wastes' compositions are kept and industrial wastes are documented via intake profile sheets. To control landfill gas production, wells are spaced about 200 feet apart throughout the Landfill, and 4 punch bars and 2 to 3 gas probes are used at the perimeters. The Landfill expects to add more gas probes along the boundaries of the Landfill at locations farther from the Landfill than where

the existing probes are located now. To gain better control of the gas collection and control system, the Landfill has implemented a number of fixes, including: pumping out water from the wells more frequently, removing moisture to the flare, installing more horizontal wells on the eastern side of the Landfill, pumping out leachate, and capping off the Landfill better. Local residents live south of the Landfill, and odor checks are done by Kimble employees driving around the site in the morning, at noon, and in the evening. The Landfill has not seen too many problems with temperature, oxygen, and pressure at the wellheads and recently hired a new employee to monitor these wellhead parameters. The Landfill receives about 3 to 4 odor complaints per year but has not experienced any recently. Currently, the landfill gas flow to the flare is around 1,700 standard cubic feet per minute (scfm). It was stated that the landfill gas needs to be scrubbed, although there is no scrubber in use. The next cell is expected to start receiving waste in 2018.

TOUR INFORMATION

EPA toured the facility: Yes

Data Collected and Observations:
At the time of the inspection, the flare was operating at 1,019°F; the gas flow was at 1,768 scfm with -34.29-inch water column (in WC) at the inlet and 3.0 in WC at the outlet; the composition of the gas was 0.9% oxygen and 50.41% methane.

Field Measurements: were not taken during this inspection.

RECORDS REVIEW

- Site Map

CLOSING CONFERENCE

Requested documents:
- GCCS design plan
- Design capacity report, documenting the waste in place and the yearly acceptance rate
- Most recent performance test on controls
- Monthly monitoring reports from this year (January 2017 – present), including wellhead monitoring, control device monitoring, and SEM
- Site map, showing the location of the collectors and probes
- NSPS reports for 2017

SIGNATURES

Inspection Report Writer: _____ Date: 7/21/2017

Section Chief: _____ Date: 7/31/17

APPENDICES AND ATTACHMENTS

On July 12, 2017, Kimble Sanitary Landfill provided the following electronic documents in response to the documents requested during the inspection:

- 2016 Greenhouse Gas Report *(2016 GHG Report.pdf)*
- Gas monitoring probe and extraction system details from March 1995 for permit plans (*7J.pdf*)
- Gas extraction details from March 1995 for permit plans (*7K.pdf*)
- Gas extraction details from March 1995 for permit plans (*7L.pdf*)
- Explosive Gas Monitoring Plan from August 2016 (*EGMP Drawing.pdf*)
- Title V Permit from January 2006 (*Title V Permit.pdf*)

The documents can be accessed via:

G:\Air Enforcement And Compliance Branch\IL and IN\VMei\Kimble Landfill - Dover OH \US EPA Download.zip